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ABSTRACT

The Comprehensive and Cognitive Development (CCD) Program of the Kansas City (Missouri) School District has completed its sixth year of operation. The CCD Program supports the integration of assessment with instructional strategies to increase the reading comprehension and cognitive skills of middle school and senior high school students. Staff development is a component of the program and a major focus of this evaluation. Teacher participation in 1990-91, at 99, was down from the preceding year and across the last 3 years. Teachers tend not to stay in the program for the 4 years requested, perhaps because the program demands that participating teachers take graduate credit, attend workshops, and attend inservice programs. Visits to different sites revealed that CCD Program activities were taking place in classrooms. Teachers who remained in the program had favorable opinions, agreeing that the program improved instruction and was accomplishing its goals. Achievement results for students seemed mixed. At both middle school and high school levels, there were no patterns across the number of CCD Program students that teachers had per day. When gain scores were used to compare students with CCD Program teachers against those with other teachers, gain scores were seen to increase at the middle school level. At the senior high school level, the pattern was reversed. Seven tables and one bar graph present evaluation data including achievement data for more than 1,000 students. (SLD)

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Summative Evaluation of the Comprehension and Cognitive Development (CCD) Program

1991

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December 1991

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Summative Evaluation of the Comprehension and Cognitive Development (CCD) Program

1991

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December 1991

Evaluation Office
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The School District of Kansas City, Missouri

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Executive Summary

The Comprehensive and Cognitive Development Program has completed the sixth year of implementation. Teacher participation was down from last year and across the last three years. Once teachers are participating in the program, they tend not to stay for the four years requested. The program is very demanding requiring teachers to take graduate credit, attend workshops and attend in-services which may explain the drop out rate.

Visits to different district sites revealed that CCD activities were taking place. Classroom observations documented the occurrence of comprehensive and cognitive strategies taking place in the classrooms.

Teachers who stay in the program have very favorable perceptions of CCD. All CCD teachers agreed that the program has improved instruction, has been involved in at least one CCD activity this past year, agreed that the graduate courses have been helped and believed that CCD is accomplishing its goals and objectives. In addition, CCD teachers appeared to be doing the things that the program said they should be doing.

Achievement results seem to be mixed. At both the middle and senior high levels, there were no patterns observed across the number of CCD teachers students had per day. When gain scores were used to compare students with CCD teachers to students with no CCD teachers two patterns emerged. At the middle high level, gain scores increased as the number of CCD teachers increased, however at the senior high level the pattern was reversed.

Summative Evaluation of the Comprehensive and Cognitive Development (CCD) Program

1991

Introduction

Following the program evaluation schedule outlined in the *Long-Range Magnet School Plan* (Hale and Levine, 1986), programs will be evaluated in three year cycles. The first three years of a program will include two years of formative evaluations and end with a longitudinal summative evaluation. Starting with the second cycle, there will be summative evaluations every three years. During the interim years of four and five, seven and eight, etc., student achievement and enrollment trends only will be reported.

Although the Comprehension and Cognitive Development (CCD) Program is not a desegregation program, its evaluation cycle will follow that outlined in the Long Range Magnet Plan. Because the CCD Program is in its sixth year, this report will be summative. Included in this report are the number of teachers in the program, operational components, observations to determine the degree to which components were infused in the classroom, the program's adherence to its goals and the achievement outcomes of the students with teachers in the program.

Program Description

The CCD Program is a program designed to support the integration of assessment with instructional strategies in order to increase the level of reading comprehension and cognitive skills in middle school and senior high school students in the Kansas City, Missouri School District. The program aims to assist in the management of instruction, to monitor students' progress and to provide outcome measures for assessing school site related educational goals. To achieve this, three components of the program are used: 1) tests to measure a student's ability to process nonfiction prose; 2) readability analyses of instructional materials; and 3) staff development activities.

When the CCD Program was initially implemented under the 1985 desegregation order (then called the "Degrees of Reading Power Program"), its purpose was uncertain. At that time, the major emphasis was to address the needs of students by aligning reading ability with appropriate materials. While the program has been in existence since the 1985-1986 school year, it was not until a full time coordinator took control that a comprehensive plan was set in motion. Because of a lack of funding, implementation of components one and two above has not been possible, so over the six years of its existence CCD has evolved into a staff development program. Development of instructional strategies and techniques has become the major thrust. The following are the goals for the 1990-1991 school year obtained from the program's coordinator:

1. Develop teachers to the point that they can develop other teachers to use effective instructional strategies;

2. Develop teachers to become strategic in thinking about and planning for instruction;

3. Develop lessons that engage students in the learning process and help them become active learners;

4. Use comprehension and cognitive development strategies;

5. Work with other teachers and share program information with CCD and non-CCD colleagues.

Evaluation Design

This evaluation of the CCD Program focuses upon the sixth year of implementation and will address the following questions:

1. How many teachers are in the program and how many students are served by them?

2. To what degree is the program achieving its goals?

3. What are the perceptions of teachers regarding the program?

4. What are the reading, language arts, math, science and social studies achievement levels across grades six to 12 as measured by the Iowa Tests of Basic Skills (ITBS) and the Tests of Achievement and Proficiency (TAP)?

5. How do achievement scores for students with CCD teachers compare to those of students with no CCD teachers?

Data concerning teacher participation in the program were obtained from the CCD coordinator. Class rosters of CCD teachers were obtained from the district's office of Information Services.

Observations were held to determine the extent program components were taking place in the classrooms. Surveys were administered to participating teachers to gain their perceptions of the program. Items focused on program implementation, the degree to which the program accomplished its goals during the 1990-1991 school year and activities of teachers participating in the program. Student outcomes on the ITBS and TAP are reported by grade level.

Results

Teacher Participation

Teacher participation in the CCD Program is displayed in Table 1 by level of instruction and year in the program. The CCD Program was designed around the concept of teachers as trainers of other teachers. During the 1987-1988 school year, when the focus of the CCD Program turned to staff development, a group (cadre) of teachers across the middle and senior high levels was formed to receive training in effective comprehension and cognitive development strategies. These teachers were to share the strategies with their colleagues.

Overall, there were 99 teachers in the 1990-1991 CCD Program, 68 middle school teachers, seven more than last year, and 31 senior high teachers, 11 less than last year. Last year there were 103 CCD teachers, in 1988-1989 there were 119 CCD teachers and in the first year of the staff development focus in the program, 1987-1988, there were 66 CCD teachers.

As can be seen from Table 1 there has been a loss of teachers over the years. Only 19 of the original 66 Year 1 teachers are still in the program. Similar losses were experienced for Year 2 and Year 3 teachers. The CCD Program places many demands on participating teachers with very few rewards or recognition. The commitment required by the program is great and could be a possible reason for the dropout rate.

Program Implementation

Staff development activities. CCD teachers were required to enroll and attend two graduate level classes, one each semester, at the University of Missouri- Kansas City. The material

Table 1

Teacher Participation in the Comprehensive & Cognitive Development Program by Level and Year in Program for 1988, 1989, 1990, 1991

	School Year			
Level / Year	1987-1988	1988-1989	1989-1990	1990-1991
Middle School				
Year 1	32	25	19	8
Year 2	—	32	19	13
Year 3	—	—	23	19
Year 4	—	—	—	28
Total	32	57	61	68
Senior High				
Year 1	34	30	13	11
Year 2	—	32	16	5
Year 3	—	—	13	6
Year 4	—	—	—	9
Total	34	62	42	31
Program Total	66	119	103	99

covered in these classes included various comprehension and cognition strategies and the strategic planning process. In addition, participating teachers were required to attend four whole day in-services, generally on Saturdays. Consultants were brought in and the focus was on strategic planning. Finally, workshops were offered, at the Norman Center or at designated secondary schools, during the second semester to those CCD teachers interested in attending. Again led by consultants, the workshops provided another opportunity for teachers to gain information and experience in comprehension and cognition strategies and the strategic planning process.

Because some of the goals of the program involved teacher participation in certain activities outside the classroom, teachers were asked about these activities on the teacher survey. Results of CCD teacher activities by the number of years in the program are presented in Table 2. Teachers that have been in the CCD Program four years have more frequently trained other teachers (item 1), have developed more model lessons (item 4), more often shared strategies with staff members not in the CCD Program (item 5) and modeled more strategies (item 6) than teachers with less experience in the program. All CCD teachers were to attend four consultant workshops during the year. The average number of workshops attended was 3.8 (item 2). Over the last year, teachers in the program one year averaged .1

Table 2

Comprehensive and Cognitive Development Program
Mean Number of Teacher Activities by Years
in the Program, Spring 1991

Item Content	Number of Years in Program				
	One	Two	Three	Four	Total
1. How many times have you trained other teachers?	.1	2.8	5.9	20.1	5.3
2. How many CCD workshops have you attended?	4.0	3.9	3.5	3.5	3.8
3. How many CCD graduate classes have you attended?	25.2	24.7	26.9	21.6	24.8
4. How many model lessons have you designed?	20.2	19.3	23.6	58.9	26.9
5. How many times have you shared comprehension and cognition strategies with staff members not in the CCD Program?	11.8	16.4	30.8	59.9	24.8
6. How many times have you modeled comprehension and cognitive strategies?	6.8	10.3	17.6	25.9	13.1
7. How many times have you observed and/or been observed by a CCD colleague?	18.6	6.1	6.2	7.5	10.8

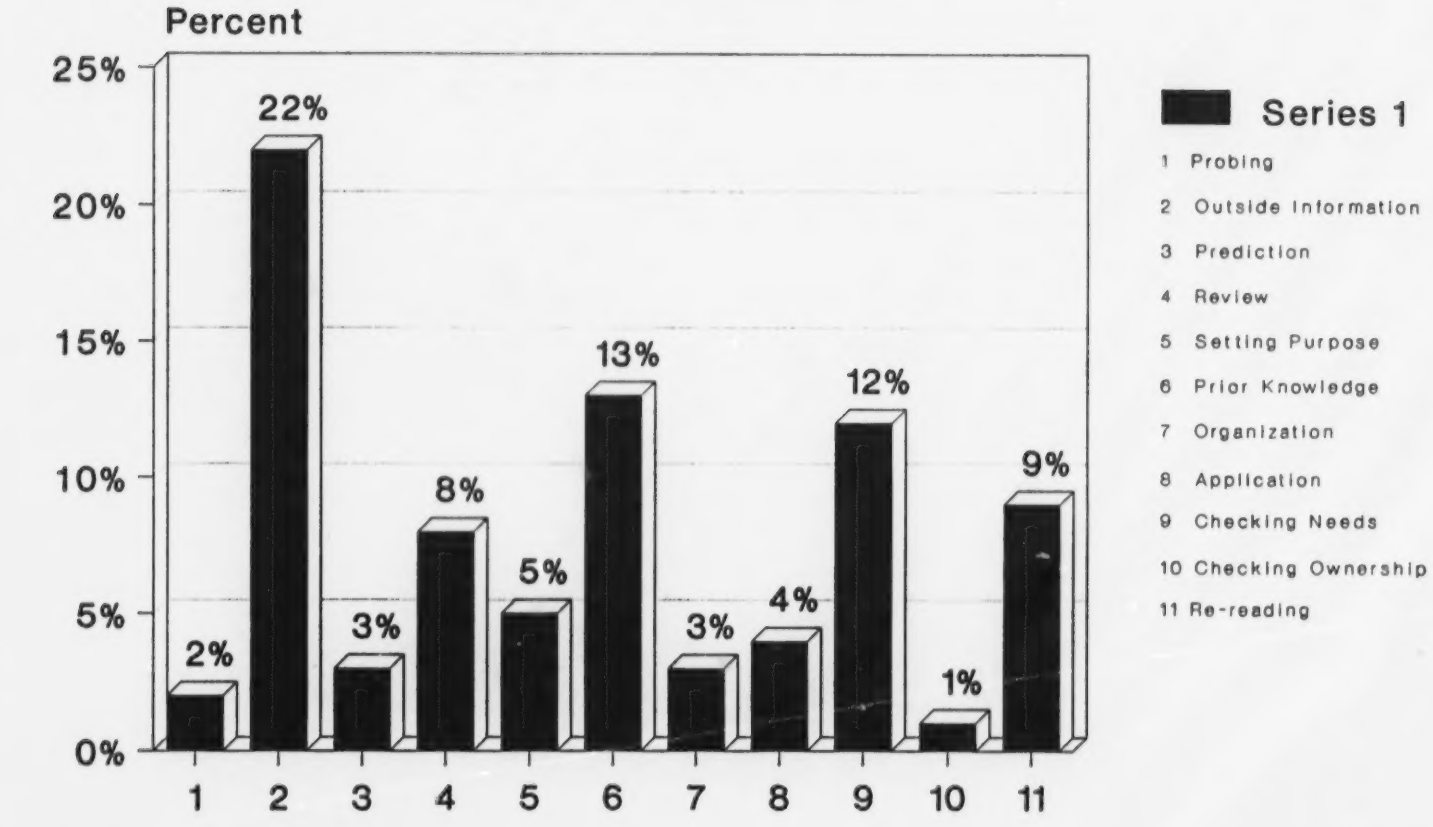
times training other teachers, while teachers in the program four years averaged 20.1 times training other teachers (item 1). Teacher responses to the activities part of the survey fall well in line with the goals of the program.

The CCD Program's goals imply that certain activities are taking place and visits to these sites (Norman center and various secondary schools) revealed that those activities were taking place. Activities observed included graduate classes, in-services, workshops and consultant days.

Classroom observations. Classroom observations of randomly selected CCD teachers at Robeson, Central Middle and Central Senior, were conducted, across all subject areas, to determine the degree of program implementation. An observation consisted of 15 minutes with each minute representing a new observation interval. Six hundred ninety-seven minutes of classroom observation intervals, involving 743 students, were completed for this evaluation.

After talking with the CCD Coordinator and reviewing previous CCD reports, 11 comprehension and cognitive development strategies were identified: 1)probing, 2)outside information, 3)prediction, 4)review, 5)setting purpose, 6)prior purpose, 7)organizing, 8)application, 9)checking needs, 10)checking ownership, and 11)re-reading. Results of classroom observations based on these 11 strategies are presented in Figure 1. The reader is cautioned that there

FIGURE 1
CCD PROGRAM



are no established standards on what is the ideal degree of implementation. The following percentages only describe what was occurring in CCD teacher classrooms.

Probing. Probing was defined as the instructor, through the use of questions, analogies and examples, attempts to encourage students to express or expand on their ideas. This strategy was observed in 2% of the intervals.

Outside information. This strategy was defined as the instructor bringing in information pertaining to the topic to establish background information or to link to prior knowledge or to further explain or develop. Outside information was observed in 22% of the classroom observations.

Prediction. This activity has the teacher encouraging the students to tell what they think about a topic, problem or situation. This activity was observed in 3% of the intervals.

Review. In this strategy, the teacher asks students to look over material to be read. CCD teachers were observed using this strategy in 8% of the intervals.

Setting purpose. In this activity, the instructor gives the students a specific reason for reading. Setting purpose was observed in 5% of the classroom observations.

Prior knowledge. This strategy has the teacher finding out what the students know about the topic being covered. This strategy was observed in 13% of the intervals.

Organizing. After the teacher has used another strategy to find out what students know or predict about topics being discussed, this activity has the instructor organizing information into categories, according to topics or specific reasons for reading. CCD teachers were observed using this activity in 3% of the intervals.

Application. After the teacher has presented the lesson of the day, students are asked to apply concepts to a problem, question or situation different from the initial information presented. This strategy was observed in 4% of the intervals.

Checking needs. This activity has the teacher making sure the students know what they are doing. Checking needs was observed in 12% of the classroom observations.

Checking ownership. In this strategy, the instructor asks students questions, to complete a matrix, create a semantic map or write a composition to demonstrate understanding of the information presented. Checking ownership was observed in 1% of the classroom observations.

Re-reading. This activity has the teacher asking students to refer back to the text or other materials to prove points, clarify ideas, substantiate answers, to delve more deeply into the

material, to look for information based upon another point of view or for a different purpose. Re-reading was observed in 9% percent of the intervals.

Perceptions

Teacher perceptions. In the Spring, CCD teachers, during their graduate course, completed a perception survey on the progress of program implementation. Data were collected from 81 teachers and the results are presented in Table 3. Overall, favorable responses ranged from 100% to 60%. All teachers who completed the survey agreed that the program has helped to improve instruction (item 3), had been involved in at least one CCD activity during the past year (item 9), agreed that CCD sponsored graduate classes were beneficial (item 11) and believed that the CCD Program was accomplishing its goals and objectives (item 13). Ninety-nine percent of the teachers surveyed agreed that they knew the goals and objectives of the program (item 2), shared instructional strategies with other teachers (item 5) and would like to continue in the program (item 12).

When asked if they did workshops/in-services in the use of effective instructional planning and strategies (item 6), 60% of the teachers surveyed agreed. The favorable response rate for this question increased when the responses were broken down by year in the program. Year 1 teachers agreed most often with this statement. According to the program goals, Year 1 teachers were to do this as part of their training, and Year 4 teachers were not, indicating program implementation.

Achievement

ITBS. Table 4 details 1991 ITBS results by grade level and number of CCD teachers per day. Reading, language, math, social studies and science scores are displayed as percentile ranks converted from mean grade equivalents. Scores are presented for sixth, seventh and eighth grade students with zero to five or more CCD teachers and the Kansas City, Missouri School District. Overall, scores ranged from 73 for students in sixth grade science who had five or more CCD teachers per day to 27 for students in sixth grade math who had four CCD teachers. No discernable pattern was observed across the number of CCD teachers a student has per day. In most instances, scores were higher for students with no CCD teachers. A possible explanation could be that CCD teachers are often in the School-Within-A-School (SWAS) Program that targets academically high risk students (seventh and ninth graders at least two years below grade level in reading and math).

Table 3

Comprehensive and Cognitive Development Program
Teacher Perceptions
Spring 1991

Item Content	Response Alternatives	N	%
1. I enjoy being involved in the CCD Program	Agree	77	96%
	Disagree	3	4%
2. I know the goals and objectives of the CCD Program.	Agree	80	99%
	Disagree	1	1%
3. I believe the CCD Program has helped to improve instruction.	Agree	79	100%
	Disagree	---	---
4. I regularly use comprehension and cognition strategies to deliver content.	Agree	77	95%
	Disagree	4	5%
5. I share with other teachers information gained about the use of effective instructional strategies.	Agree	80	99%
	Disagree	1	1%
6. I do workshops/in-services in the use of effective instructional planning and strategies.	Agree	43	60%
	Disagree	29	40%
7. This year I have designed a model lesson which reflects infusion of comprehension and cognition strategies.	Agree	79	98%
	Disagree	2	3%
8. During the past year I have planned, with cadre team members, ways of sharing comprehension and cognition strategies with other instructional staff members.	Agree	64	81%
	Disagree	15	19%
9. I have been involved in at least one of the following activities during the past year: modeling strategies, engaging in peer coaching, or video taping model lessons.	Agree	81	100%
	Disagree	---	---
10. Meeting on school days with CCD consultants has been helpful in the implementation process.	Agree	78	96%
	Disagree	3	4%
11. CCD sponsored graduate classes have been beneficial in learning about and implementing the comprehension and cognitive development strategies.	Agree	81	100%
	Disagree	---	---
12. I would like to continue in the CCD Program.	Agree	78	99%
	Disagree	1	1%
13. Overall, I believe the CCD Program is accomplishing its goals and objectives.	Agree	81	100%
	Disagree	---	---

Note: Percentages are rounded to the nearest whole percent.

TAP. Results by grade level and number of CCD teachers per day of the 1991 administration of the TAP are presented in Table 5. Reading, written expression, math, social studies and science scores are displayed as percentile ranks converted from mean grade equivalents. Scores are presented for ninth through twelfth grade students with zero to three CCD teachers and the Kansas City, Missouri School District. Overall, scores ranged from 49 in ninth grade

Table 4

Iowa Tests of Basic Skills Mean Percentile Ranks by Grade and Number of CCD Teachers per Day Spring 1991

Test Grade/N[1]	Number of Teachers per Day: None	One	Two	Three	Four	5 or More	District Total
Language							
Six\ N	42\ 1103	36\ 532	42\ 315	38\ 175	34\ 53	33\ 42	39
Seven\ N	45\ 1104	43\ 517	40\ 262	44\ 73	53\ 9	*\ ---	43
Eight\ N	47\ 1285	41\ 247	42\ 71	35\ 12	*\ ---	*\ ---	44
Mathematics							
Six\ N	36\ 1127	30\ 550	33\ 322	29\ 177	27\ 55	33\ 44	34
Seven\ N	35\ 1135	34\ 518	31\ 265	43\ 70	42\ 9	*\ ---	34
Eight\ N	36\ 1302	29\ 255	29\ 71	29\ 11	*\ ---	*\ ---	34
Reading							
Six\ N	36\ 1131	29\ 556	34\ 323	31\ 177	29\ 56	29\ 43	33
Seven\ N	39\ 1135	37\ 526	32\ 267	37\ 76	45\ 9	*\ ---	38
Eight\ N	42\ 1308	35\ 256	33\ 71	29\ 12	*\ ---	*\ ---	39
Science							
Six\ N	51\ 1048	46\ 517	55\ 313	50\ 168	54\ 54	73\ 38	51
Seven\ N	51\ 1066	56\ 490	52\ 245	52\ 71	45\ 9	*\ ---	52
Eight\ N	51\ 1205	39\ 246	53\ 71	52\ 11	*\ ---	*\ ---	47
Social Studies							
Six\ N	47\ 1045	41\ 517	48\ 310	44\ 167	51\ 54	41\ 38	46
Seven\ N	41\ 1069	37\ 494	35\ 245	41\ 71	43\ 9	*\ ---	39
Eight\ N	42\ 1202	33\ 246	31\ 71	28\ 11	*\ ---	*\ ---	39

Note: Percentile ranks converted from mean grade equivalents.

* Less than 4 students.

1 Number of students actually taking the test.

written expression with two CCD teachers per day to 21 in eleventh grade science with two CCD teachers per day. Generally, scores were higher for students with no CCD teachers. Again this could be explained because CCD teachers are often in the SWAS program, which targets academically high risk students.

Comparative study. In order to compare gains of students with CCD teachers to the rest of the district, a random sample of comparable district students was obtained. Analysis of variance was used to analyze 1991 ITBS and TAP reading, language (written expression for senior high), math, social studies and science gain scores. Results of these comparisons are displayed in Tables 6 & 7. The .05 significance level was used to determine significant differences.

Table 5

Tests of Achievement & Proficiency Mean Percentile Ranks by Grade and Number of CCD Teachers per Day Spring 1991

Test Grade/N[1]	Number of Teachers per Day: None	One	Two	Three	District Total
Mathematics					
Nine\ N	38\ 1134	34\ 318	26\ 88	*\ ---	36
Ten\ N	41\ 707	40\ 447	33\ 64	*\ ---	40
Eleven\ N	45\ 712	33\ 162	27\ 46	*\ ---	40
Twelve\ N	41\ 599	37\ 151	30\ 22	48\ 8	39
Reading					
Nine\ N	44\ 1114	40\ 310	29\ 87	*\ ---	41
Ten\ N	42\ 700	42\ 442	34\ 60	*\ ---	43
Eleven\ N	44\ 708	35\ 161	23\ 44	*\ ---	40
Twelve\ N	42\ 591	38\ 149	34\ 22	36\ 8	39
Science					
Nine\ N	43\ 1097	42\ 311	28\ 90	*\ ---	40
Ten\ N	48\ 682	45\ 436	34\ 61	*\ ---	46
Eleven\ N	45\ 695	34\ 155	21\ 44	*\ ---	43
Twelve\ N	44\ 580	37\ 144	33\ 19	32\ 8	41
Social Studies					
Nine\ N	40\ 1087	41\ 311	31\ 87	*\ ---	41
Ten\ N	47\ 686	46\ 435	35\ 59	*\ ---	43
Eleven\ N	47\ 698	41\ 155	28\ 43	*\ ---	42
Twelve\ N	40\ 569	37\ 144	30\ 19	23\ 8	38
Written Expression					
Nine\ N	47\ 1119	47\ 317	49\ 89	*\ ---	45
Ten\ N	48\ 702	48\ 443	45\ 62	*\ ---	44
Eleven\ N	46\ 707	38\ 161	27\ 42	*\ ---	42
Twelve\ N	42\ 582	38\ 148	33\ 20	40\ 8	41

Note: Percentile ranks converted from mean grade equivalents.

* Less than 4 students.

1 Number of students actually taking the test.

At the middle school level, the general trend was that gain scores increased with more CCD teachers per day. Students with five CCD teachers per day scored significantly higher (p.05) in sixth grade math than did students with one CCD teacher per day. Sixth graders with five CCD teachers scored significantly higher in science than both students with no CCD teachers and students with one CCD teacher. Seventh graders with two CCD teachers per day scored higher in math than students with one CCD teacher. Finally, eighth graders with no CCD

Table 6

Iowa Tests of Basic Skills Mean Gain Scores
by Grade & Number of CCD Teacher per Day
Spring 1991

Test Grade	None	One	Two	Three	Four	Five
Reading						
Six (N = 34)	.63	.29	.66	.68	.37	.56
Seven (N = 66)	1.18	.84	1.05	1.15	----	----
Eight (N = 76)	.86	1.09	.62	----	----	----
Math						
Six (N = 34)	.58	.38$_a$	.73	.66	.49	.91$_b$
Seven (N = 66)	.83	.75$_a$	1.11$_b$	.97	----	----
Eight (N = 76)	.76	.68	.74	----	----	----
Language						
Six (N = 34)	.40	.29	.66	.44	.25	.29
Seven (N = 66)	1.14	.95	1.13	1.01	----	----
Eight (N = 76)	.77	.78	.73	----	----	----
Social Studies						
Six (N = 34)	1.16	.69	1.25	.81	1.11	1.31
Seven (N = 66)	.91	.53	.68	.98	----	----
Eight (N = 76)	.83$_a$	.94$_a$	-.21$_b$	----	----	----
Science						
Six (N = 34)	.62$_a$	.58$_a$	1.37	1.14	1.59	2.82$_b$
Seven (N = 66)	1.37	1.50	1.94	1.38	----	----
Eight (N = 76)	.31	.39	.53	----	----	----

Note: Mean gain scores are presented as differences between 1991 grade equivalents and 1990 grade equivalents. Across a row, mean gain scores having the same subscript are not significantly different at $p < .05$.

teacher or one CCD teacher significantly out scored students with two CCD teachers in social studies.

At the senior high level, the general trend was that scores decreased with more CCD teachers per day. The only significant differences occurred at the ninth grade. In ninth grade math, students with no CCD teachers scored significantly higher than students with two CCD teachers. Ninth graders with two CCD teachers outscored students with no CCD teacher or one CCD teacher in written expression. Students with no CCD teacher or one CCD teacher significantly outscored students with two CCD teachers in science.

Table 7

Tests of Achievement & Proficiency
Mean Gain Scores
by Grade & Number of CCD Teacher per Day
Spring 1991

Test Grade	None	One	Two
Reading			
Nine (N = 76)	.89	.81	.50
Ten (N = 49)	.41	.70	.54
Eleven (N = 35)	1.06	.78	.03
Twelve (N = 26)	.68	.83	.75
Math			
Nine (N = 76)	1.00$_a$	.77	28$_b$
Ten (N = 49)	1.10	.72	.32
Eleven (N = 35)	1.07	.76	1.17
Twelve (N = 26)	.25	.98	.64
Written Expression			
Nine (N = 76)	.89$_a$	1.19$_a$	2.10$_b$
Ten (N = 49)	1.38	.97	.77
Eleven (N = 35)	.86	.07	.20
Twelve (N = 26)	.98	.70	.79
Social Studies			
Nine (N = 76)	1.35	1.00	1.21
Ten (N = 49)	1.20	1.82	1.11
Eleven (N = 35)	.84	1.34	1.08
Twelve (N = 26)	.75	.22	.12
Science			
Nine (N = 76)	1.07$_a$	.92$_a$	-.18$_b$
Ten (N = 49)	1.16	1.52	.95
Eleven (N = 35)	1.36	.39	.58
Twelve (N = 26)	.94	1.17	.87

Note: Mean gain scores are presented as differences between 1991 grade equivalents and 1990 grade equivalents. Across a row, mean gain scores having the same subscript are not significantly different at $p < .05$.

Summary and Recommendations

The CCD program has completed its sixth year of implementation with the end of the 1990-1991 school year. Participation, observation, perception and achievement data were examined to determine the degree and success of program implementation.

Teacher participation in the CCD program appears to be declining over the years at both the middle and senior high levels. The program is currently designed to train teachers to be

trainers of other teachers. It is thought that this process takes four years to accomplish. Because 1990-1991 is the fourth year of this facet of the program the full impact of the CCD program should start to be felt next year, yet almost three-fourths of the original teachers are no longer with the program.

Visits to sites where program activities were scheduled to be revealed that those activities (graduate classes, workshops and in-services) were taking place. Classroom observations documented the occurrence of comprehension and cognitive strategies in classrooms. Bringing in outside information was the strategy used most often by CCD teachers.

Teacher perception data were very favorable concerning program implementation of the CCD program. Responses to the activities part of the teacher survey revealed that activities were well in line with program goals. For example, Year One teachers (teachers in the CCD program for four years) were to train other teachers, while Year Four teachers (in the program one year) were to be trained. The results of the survey reflected this very pattern.

Perceptions of teachers in the program are almost unanimously favorable on every item. All items but two had favorable response rates above 95%. Those two items were related to activities that teachers with more experience in the program would perform. Indeed, when responses for those two items were broken out by the number of years in the program, the favorable response rates increased to the levels of the other items.

Achievement results were mixed at best. There were no discernable patterns in test scores and the number of CCD teachers students had per day. This occurred at both the middle and senior high levels.

Gain scores for students with CCD teachers were compared with students with no CCD teachers. Overall for the middle school level, gain scores either increased or stayed the same as the number of CCD teachers increased, while at the senior high level, gain scores decreased as the number of CCD teachers increased.

The following recommendations are offered based on findings presented in this evaluation:

1. <u>To complete the CCD program as it is now designed, teachers need to participate in the program four years</u>. This year is the first time that teachers had been in the program for that period of time. Yet out of the original 66 teachers, only 19 stayed with the program over the four years. The CCD coordinator and the interviewing CCD teachers (Year Two) need to select teachers who are willing to commit to four years in the program and make perspective CCD teachers aware of what that commitment includes.

2. The CCD program introduces participating teachers to various comprehension and cognition strategies that are also desirable in SWAS teachers. This aspect may confound the effect both programs have on student achievement. Every effort should be made to determine which teachers are only in the CCD program to allow for better examination of achievement data.

References

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